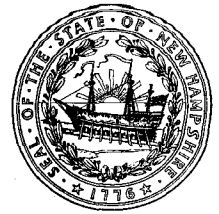




The State of New Hampshire  
**Department of Environmental Services**



**Michael P. Nolin**  
Commissioner

March 30, 2004  
**Letter of Deficiency**  
DSP#04-014

Mr. Tom Dutton  
City of Keene  
Public Works Department  
350 Marlboro Street  
Keene, NH 03431

RE: Woodward Pond Dam#206.01, Roxbury

Dear Mr. Dutton:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 1, 2003. During this visual inspection and/or file review, the following deficiencies were observed:

1. Due to the placement of riprap along the upstream face of the dam, the crest of the dam was relatively void of a vegetative cover. It was reported upon completion of the placement of riprap and the repair of the overflow spillway, the crest of the dam was scheduled to be reseeded;
2. Brush was abundant within the reach of the outlet channel down to the recently replaced culvert below the access road;
3. There was seepage noted along the right side of the low level outlet (as reported in the previous inspection report flow was approximately 5 gpm) and on this date appeared to be similar to conditions as in past inspection reports/photos. Also it was noted that much of the seepage was exiting a 2-inch diameter pipe at the right side of the low-level outlet;
4. There was seepage at the toe of the dam approximately 100 feet to the right of the primary spillway. A weir had been placed for monitoring purposes prior to this date. On this date the seepage was observed to be exiting below ground prior to reaching the in place weir;
5. There were trees within 15 feet of the low-level outlet headwall and within 15 feet of the low-level outlet;
6. No rodent holes were observed on this date as were noted in the previous report and it was indicated that the previous holes had been backfilled and seeded;
7. There was an abundance of small brush at the right abutment of the dam along the upstream embankment as was noted in the previous report; and

8. The Emergency Action Plan (EAP) notification flowchart needs to be tested and updated since April 2001.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

**May 1, 2004:**

1. Conduct a test of the EAP notification flowchart and update the EAP as necessary. If you have questions relative to the testing or updating of your EAP you can contact Bethann McCarthy, P.E., our EAP coordinator at 271-3406;

**September 1, 2004:**

2. Repair (if not completed as of this date) the crest of the dam, which had exposed soils due to the placement of riprap at the time of this inspection;
3. Remove the brush and small tree growth throughout the primary spillway channel and downstream embankment of the dam in this location;
4. Reset the previously placed weir, to monitor the seepage at the toe of the dam, approximately 100 feet to the right of the primary spillway near the toe of the embankment;
5. Remove the trees within 15 feet of the low-level outlet headwall and within 15 feet of the low level outlet;
6. Remove the brush from the upstream slope of the right abutment; and

**On a continuing basis:**

7. Monitor the seepage noted along the right side of the low level outlet and from the toe of the embankment, approximately 100 feet to the right of the primary spillway. Keep a formal log to record the seepage measurements and submit the results to this office.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

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Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the cover page.

Sincerely,



Dale F. Guinn, P.E.  
Dam Safety Engineer

Attachments DB8, DB13

cc: Gretchen Rule

Town of Roxbury

Bethann McCarthy, P.E., EAP Coordinator

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